



STOCK FEEDING.

Summary of Fifteen Years' Research in Animal Nutrition.

In sections of the great west that are well developed, certain factors should be observed in the production of meat for both economy and for quality. I shall summarize the results of some fifteen years of continuous research in animal nutrition, and some twenty-five years of observation as a stock feeder, without marshaling the corroborating data, which are often voluminous, in support of the direct assertion made.

Only good animals that inherit good forms, or that have the largest ratio of choice parts to the whole carcass, should be bred, because such steers always sell at 25 per cent. or more higher than those steers that are of ordinary structure. The latter class of steers return less revenue for the feed eaten without a single compensating advantage. It is a sluggish mind that follows the practice of feeding ill made steers.

It is well known that meat varies in individual animals in flavor and in tenderness. The development of the art of breeding and of the intelligence and of the tastes of men has arrived at that stage of growth that demands the selection of breeding stock with reference to points suggested. The qualities mentioned, like every other animal characteristic, are hereditary, and may be forced in a family.

In view of the heretofore expressed belief that our cattle should be tested to ascertain their capacity for consumption, digestion and assimilation of food, animals vary in their powers in these directions, and only those that possess these powers to a high degree should propagate their kind. Breeding has fixed form by following a standard, but I assert that it has not fixed the qualities in question. It is possible for a weakling to become as great a worker for stock improvement as that of Bakeswell.

"Good good" is the motto, "except" forming very largely so. Without organizing any coordinating units I assert a conviction that will excite the indignation or contempt of many able men, that the native stock of this country will make nearly as much, possibly quite as much, from a pound of food as will our pure bred stock. If my position is true, and I am sure that it is far nearer the truth than breeders have thought, it means that breeders must now look beyond form, and that poor feeders must eat food more than they have. The poor feeder is pampering himself.

Shelter in the north reduces the amount of food consumed, increases the value of manure produced and increases the value of hay housed. These gains pay for shelter, and the assertion rests upon practical trials. I found over 12 per cent. of my hay was lost in the ordinary stack, and only about 1 per cent. in the mow, while less hay was eaten by sheltered steers and sheltered pigs than by unschooled ones.

Steers must grow steadily from birth to death. About two-thirds of the food eaten by a half grown animal is used for maintenance, hence every day that an animal merely holds his own, it is burning the taper without giving light, and is therefore using food at a total loss. Almost all of the philosophy of early maturity in its relation to economy of growth rests in this fact. A 4-year-old steer that weighs no more than a 2-year-old steer has consumed twice the food of maintenance, and therefore has consumed a very high ratio of unnecessary food.

Steers should be sold at the highest weight that will bring the highest market rate. This is due to the fact that the food of maintenance is really in proportion to weight, hence the food that would merely maintain a nearly matured steer, or say one weighing 1,400 pounds, would be more than enough to make two pounds of growth if fed to calves weighing 300 pounds; in fact, it would feed two such calves and make a pound of growth on each.

Our cheapest beef is made on pasture feed, and only by pasture feed is it possible to sell beef at a profit. The most direct road to the cheapest beef, and pastures should therefore receive the first and most thoughtful attention of feeders.

The west will have to consider feeding animals more with reference to their influence on the fertility of the farm and less with reference to direct profit than has been heretofore the case. J. W. Sanborn in Clay & Robinson's Report.

Advantages of Sheep.

It will in reality pay to grow sheep for mutton alone, and the money obtained for wool is all clear gain. One of the chief advantages of handling sheep is that it is practicable to keep them constantly under your eyes, and much loss may be prevented which would occur if this was not the case. Another important point is that they will flourish on a short range. Then they yield readily to will in the matter of breeding. You can change in the shortest possible time whenever the fashion in wool or flesh changes. Then, under the present demand for mutton, there is no necessity for over having any old sheep on hand, as this class can be worked off from year to year and the flock kept young and thrifty. It is also possible to build herds of capacity to house as large a number as a given range will feed, and being prepared to house a flock properly winter loss is not only prevented, but the best success is assured in lambing. With successful lambing and wintering, a flock made certain and a fair price for wool on mutton alone would pay expenses, is nothing to prevent our flock from becoming rich in a few Rocky Mountain Husbandmen.

great horse sales of the country and blood fixes the price.

TRAINING A COLLIE.

An Old Trainer Gives Directions for Dog Education.

An old trainer of wide experience gives these rules for educating the collie so that he may become a useful citizen; we know from experience that an undisciplined collie may easily become a perfect ramp.

It is almost useless to commence training the pup until it is 6 months old, except to teach it obedience, and this you can do at 2 to 4 months old. It should be practiced at a certain hour every morning, before eating its meal, that it may understand it is a task to be done. Do not immediately after that it may soon learn to look upon it as a reward for doing that task. Never play with the dog while training him; always keep strictly to business at that time. Never allow any one to be with you during the training, as he may concentrate his dog's intellect upon the work in hand.

He positively must never be struck a cruel blow while in training, or his attention will be drawn to the whip instead of the lesson. Use the whip to motion with. Remember if you break the will of your puppy by harsh or cruel treatment it will be useless. The first few lessons may be blank failures; the puppy may lie down and refuse to do what you desire of him. To stress your puppy at only a few non-compliance, and he will be made to do right. The only course to pursue is to teach the lesson to play. In one or two or three his lessons are dispensed and he is ready to be handled.

The master and only one must a pup have all the other members of the family should be strictly forbidden to give him orders or cultivate his attention. He must be taught obedience, and to obey your commands implicitly, before attempting to work him on stock. You can do this by using some word of command when feeding, and you should do this. Your pup should be at all times given in a quiet, easy tone, never allowing your voice to become angry. The very best training dog needs respecting at times, but he must be made to come upon hundred times to be patient and rewarded, where he comes up once to be punished.

Never allow him to be with the stock unless you are with him, as he may control the stock. When first for a few times taking him with the stock, do not allow him to work at all, but do the work yourself, and then him close to you, to teach him to the stock and the stock to him. In case he is inclined to run off, or to bark, or to show any sign of disobedience, make the best lesson short, and be sure he learns one thing thoroughly before entering upon another task. He must never, on any account, be allowed to go out and bark at the stock; it is a very difficult thing to prevent, but, if he does it, he must be called back and punished to drive him out.

The old saying, "A barking dog never bites," is just what you want in a dog driving sheep or cattle. In fact, a dog which barks at the stock must be restrained and punished. Young dogs are very apt to nip the heels of the stock. This must be taught to confine themselves to barking alone. If held back by a rope, and a great deal of barking is made, he will get no farther, and once this is accomplished the way will be easier hereafter. In speaking to the dog always use the same words of command and gestures, as "Go fetch your dog," "Fetch away," "Fetch out," "Fetch in," "Fetch the hand or whip in making gestures.

—Rural New Yorker.

Big and Little Horses.

A Scotchman has said that if one were to take the colossal Clydesdale horse to Scotland, turn him out to rough it in the cold and rain and pick his own living off the hillsides and valleys, in the course of time the horse would become as small and tough as the little "Sheltie."

We give illustrations here of two extremes of horse families. The large



PERCHERON AND SHETLAND.

horse shown in the picture is a magnificent imported Percheron stallion, of the stock bred by the French government. Few finer animals than this have ever come to America.

The little horse is a Shetland pony, and the illustration exhibits well the difference in their respective size. Shetland ponies are becoming profitable animals to breed in this country on account of more and more of them being required every year for children's carriages. A pair of good Shetland ponies sells for from \$200 to \$300. They are also much used for riding by children and young girls. They are docile, but rather obstinate little creatures that walk, canter and gallop well.



NATIVE SHETLIE.

The Shetland pony was undoubtedly originally of the ordinary sized horse, and it has been stunted and dwarfed in comparison with the modern horse, by the limited food and the general necessity of roughing it in the Shetland isles. The people of Shetland are small, like the ponies. The little animal has been much improved since it became a fashionable horse among the children of the wealthy in Europe and America. In the first picture above is seen the improved Shetland that constitutes the pony of fashion. In the second illustration is the original rough Sheltie, just as he came from his native isles, before generous food and care had made the breed shiny and symmetrical.

Weakling Colts.

"Observer" lays all blame for weak colts at feeding time to the treatment of the stallion during winter. I coincide with The Gazette's comments, but think if "Observer" would observe he might find that the mares were short of exercise with too much corn, corn fodder, clover hay and fat to produce healthy, strong foals to the cover of any horse in any condition. My experience teaches that in nine cases out of ten it is the wintering of the mare that kills the colt.—Cor. Breeder's Gazette.

The Soldier Got Even.

In the early days of the civil war the Maine volunteers' regiment were quartered at Augusta several weeks after their organization to be drilled and trained before going to the front. Many of the soldiers were young men from the country, in whose pockets the bounty money burned as long as it lasted, to the great advantage of Augusta store and stable keepers.

Two soldiers came into a livery stable one morning and asked the proprietor how much he would charge for a team to go to Waterville.

"Six dollars," was the reply. The largest was closed and the soldiers drove off. Toward night they returned, and one of them stepped into the office and tendered the proprietor six dollars.

"Oh, no," he exclaimed. "Your bill is twelve dollars."

"How is that?"

"Why, you asked me how much for a team to take you to Waterville, and I said six dollars; but you came back, didn't you? I meant six dollars each way."

The two friends, after a little conference, paid the swindler the twelve dollars and went away without a word.

About a week later a soldier again appeared at the stable office and inquired, "How much for a team to Waterville?"

"Six dollars," replied the proprietor, not recognizing the man upon whom he had played so mean a trick the week before.

The soldier took the team and started off. About 5 o'clock in the afternoon he appeared on foot, and walking into the office, said:

"Here's your six dollars for that team I hired this morning."

"But where's the team?" was the astonished rejoinder.

"Oh, I only hired it to go to Waterville, you know. I left it at the hotel stable down there. It cost me six dollars to bring it back last week, so I thought I'd return by car this time. It's so much cheaper, you see," and he left the proprietor to his meditations about the comparative smartness of civilians and soldiers.—Youth's Companion.

The Intelligent Man Abroad.

"You know," said a lively companion who had recently arrived "from the other side," "what the thing in England is for a man to be quiet and unobtrusive in a drawing room, and for the women to be lively and amusing; that is why our women are such a success over there. They can talk about all sorts of things and amuse people. On the other hand, however, the average American man is not much cared for."

An American at his best is witty, entertaining, versatile—a conversationalist in fine, and that is just what the smart set in England do not like for a young man to be an intelligent talker is considered almost bad form. There may be certain reckless individuals that hold the place of licensed court jesters, as it were, but it is an unwritten law that the fashionable young man should be deadly quiet, unless he is among his intimates, when he seems to enjoy a sort of horsplay with jest that strikes an American as almost artless, not to say imbecile. But introduce the same lively youth to a stranger, and he freezes into a solid politeness that is almost crushing.

So our clever young countrymen are really too clever and too naturally chivalrous to women to have the "culture" that belongs to a really fashionable youth. This, however, is not the case of the middle-aged American in London, particularly if he be not of his own country. He, like the American girl, is expected to show his powers, and the English world is ready to applaud him, dine him and find him vastly entertaining. In short, he can be no end of a success. If he is an artist, poet or literary man of any kind he has the open sesame to a delightful set of people.—New York Tribune.

With a Slight Alteration.

The streets were crowded with pedestrians hurrying along. Among the throng was an aged lady attired in shabby black. From the armful of bundles, which some kindly clerk had endeavored with a strong cord, a small package, which for some time had been slipping away from its companions, suddenly made its escape, and fell with a crash upon the dirty pavement, bursting open and scattering a dozen reels of thread in every direction.

Tears stood in the old lady's eyes. Benevolent-looking gentlemen passed by, never offering to help her in her trouble and even smiling a little at her dilemma; ladies frowned haughtily at the little old lady in black who blocked the way.

Just at this moment a lad, not ten years of age, passed along. His clothes were poor and patched, but clean, and there was a look of intelligence upon his frank, open face. Pressing his way to the center of the group he took in the whole situation at a glance, and stepping to her side he said in a pleasant tone:

"Let me hold your bundles for you. I have a grandmother at home myself."

"Heaven bless you, my boy!" exclaimed the grateful old lady, and snatching down she had the scattered reels up in a moment, and turned to thank the noble lad, but he was not there. He had disappeared with the armful of bundles he had endeavored around the nearest corner, and was lost amid the labyrinthine streets of the great city.

Moral—Do not be too sure that the story will always turn out in the stereotyped way.—London Tit-Bits.

Dedicate.

I have all the delicate ways that she has: Her hair is soft and delicate curls. She's a delicate person and a delicate pose. And a delicate and delicate style. Her delicate voice is a musical treat. As rhythmic, fountain-like, and playful. But, at heart, she is a very delicate poet. In her delicate way for each.

—New York Herald.

Insuring a Person.

"Fuzle"—What are you cutting that piece out of the paper for?

"Cuzso—I'm going to take the paper home, and I'm very anxious for my wife to read the article, as it is on economy in dress. If I merely take the uncut paper home she won't see it."

"Fuzle"—But I don't see how she's going to see it if you take the paper with the item cut out.

"Cuzso—Well, when she sees the place where the article was she'll be so curious to know what was cut out that she'll send and get another copy."—New York Sun.

Not a Matter of Choice.

"I think she is a two faced creature," said one of the girls indignantly.

"Oh, no," returned Mr. Cordill; "if she had two faces she would never use this one."—Washington Star.

Before and After.

Merritt—I thought the old man would have come down handsomely. Wasn't your wife his favorite daughter?

Penfield—She was before she married me.—Life.

WAYSIDE GLEANINGS.

In the reign of Queen Victoria England has had fifteen wars.

According to a doctor's estimate one person in nine is left-handed.

Santa Fe is the oldest capital in the United States, having been the seat of New Mexico's government as far back as 1640.

Chili, with a territory equal to that of all the states, northeast of Pennsylvania, Ohio and Indiana, those included, has a population of only 2,000,000.

The beautiful weeping willow which for so many years shaded the burial place of the great Napoleon at St. Helena is now dead, and nothing remains but a barren stump.

One of the objects of interest at Stouvenville, O., is an old foundry, built in 1820, with wooden pins for walls. It is pointed out as the place where Major McKinley's father worked in his youth.

Few of us know how much money is

spent in matches. In Sweden, for example, the Aspen forests have been so reduced through the manufacture that now that country has to import its lumber from Russia.

The copper colored Choctaws dislike the black skinned negroes, and have adopted a law for their exclusion from the Choctaw country. The Choctaws dislike the whites not less than the blacks, and hold that they themselves are the cream of creation.

By intermarriage with colored people the Marshpee Indians in Massachusetts have increased to about 400. They occupy a reservation on the shore of the lake in Marshpee, called Ma'shpi by Cape Cod folk. Cateannut, the chief of the tribe, is the postmaster.

Chicago is to have a bigger statue of Benjamin Franklin than New York has. The statue in Printing House square is about the size that Franklin himself was, but the Chicago statue of him is to be twenty-one feet in height, or nearly four times as tall as he was.

EPICUREAN MORSELS.

Pickle soup is a Russian abomination. Chicken salad made without celery is a fraud.

Potato pancakes are a favorite dish in Germany.

Perhaps the best of all ways of cooking oysters is a la poele.

The large, coarse oysters of other days are not likely to be recalled.

In Siam a curry of nuts' eggs is a necessary part of a fashionable dinner.

The Russians are very fond of fish soup, made preferably of the sturgeon.

The culinary possibilities of chestnuts are sadly neglected in this country.

The swan, little used for the table, is nevertheless one of the most toothsome birds that ever adorned a spit.

The hard shell almond, though cheaper and less expensive than the table variety, is the tenderest and best flavored of all—Hotel Mail.

The following appears at the head of the Tawood Real Estate Company's advertisement in the Irish World:

NOTE.—Before inserting an advertisement like the following, The Irish World always investigates, as far as possible, all about the enterprise, its promoters, its prospects of success, etc., etc. And in this particular case we have the following from a thoroughly reliable man on the spot, who, we believe, knows all about the enterprise and its promoters:—

"I believe investors would do well to invest with the Tawood Company, for it will be only a short time until the land owned by said company will be very valuable. These improvements are all genuine. Having noticed how real estate has enhanced in value in and Portland, I have no hesitation in reporting favorably on the question submitted to me. There is small chance of purchasers losing anything, and there is every reason why they will realize a large profit."

REAL ESTATE IS THE BASIS OF ALL WEALTH.

20% TO 30%

Can be made on money invested in

PORTLAND, OREGON.

The Great Western Railway Terminus!

The Great Pacific Seaport City!

A COMMERCIAL CENTRE is the safest place to invest in real estate, especially when such place is a great railway centre; has good river transportation and large foreign and domestic shipping. Portland is that place. "A LAND FLOWING WITH MILK AND HONEY."

PORTLAND, OREGON, is now the recognized commercial center of the Pacific Northwest. In natural resources, in location and in rapid growth this city leads. As a port of entry and a railroad centre it excels every other. By way of the Mississippi river, Portland has never been boomed. The growth is legitimate as it is rapid. In 1879 Portland had 16,000 population, to-day it has at least 50,000. In five years she will have 200,000 to 300,000 people within her limits. Portland is now or soon will be the terminus of more trans-continental railroads than any other city in the United States. This may seem extravagant, but it is a fact.

HER GREATNESS FORE-ORDAINED. Geographical Magnet, that draws all men by her natural resources, matches climate, commercial supremacy, productive soil; never-failing crops; fisheries; mines and minerals; vast forests; great fisheries; prime fruits; railroads; ships and shipping; grand scenery and attractions too numerous to mention. While it has taken three hundred years to make New York what she is, Portland will be a greater city in less than fifty years. Nothing can prevent this. It is the best place in the United States for a home, and the best place in the world to invest money, as real estate will rapidly increase in value, now that the tide of immigration is headed for Portland, Oregon, as no where else.

THE TAWOOD REAL ESTATE CO.

Has a plan by which non-resident investors can make money. It is one that will commend itself to the good judgment of any man or woman who will take the pains to read the prospectus. The plan is endorsed by the best men in Oregon, in fact, it is one of the surprises whose merits are self-evident.

Capital \$300,000 6,000 Shares at \$50 Each.

Shares For Sale at Par Value, \$50 Per Share, Full Paid, Non-Assessable.

Company passed resolution to advance price of stock 10 per cent March 1, 1892.

The Tawood Real Estate Company's plan makes the smallest owner of stock in this Company a co-partner in the purchase of property by the acre to be sold in lots at the most advantageous prices. The stockholders of this Company in Portland are safe, well-known and reliable men. The managers of this enterprise are thoroughly responsible, and in this special field have invariably had excellent success. This Company will furnish you certain statements of companies organized by the same management as this Company, giving their history and profits realized. The success of these companies is a sufficient guarantee to justify you in making as investment in the stock of this new enterprise.

A FAIR OFFER

If you own stock, and at any time wish to surrender it, this Company will take its own stock at \$1.40 on the dollar and pay you in Real Estate at the price at which the Company is selling lots to other parties.

THE STORY FULLY VERIFIED.—WHAT HAS BEEN DONE AND WHAT MAY BE DONE HERE.

To Whom It May Concern:

F. O. McCowen, Attorney at Law, Oregon City, Or.

T. A. Wood induced me in 1880 to invest \$1,500 in a suburb of Portland, Oregon. I have made \$48,500 out of the above investment, \$3,000 in cash and balance in real estate. I have known T. A. Wood of Portland for 27 years, and so far as I am informed all who have purchased of him or through him have done well.

The following well known citizens of Portland will testify to the truth of the above statement, also to the success of other real estate enterprises conducted by the same management as The Tawood Real Estate Company: Wm. McFall, Secretary Salford Real Estate Company; Joseph L. McArthur, Secretary Portland City Real Estate Association; E. T. Howe, Chairman; H. W. Scott, Editor "Oregonian"; H. L. Pitcock, Manager and Treasurer "Oregonian"; S. J. Barber, President West Portland Park Association.

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